BENJAMIN D. WALLACE.

Improvement in Scroll Saws.

No. 118,498. Patented Aug. 29, 1871.

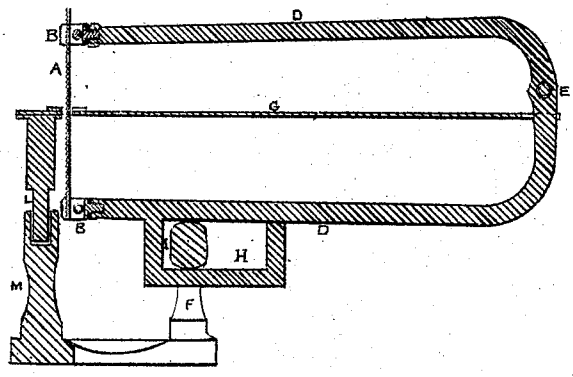

Fig. 1

Fig 6

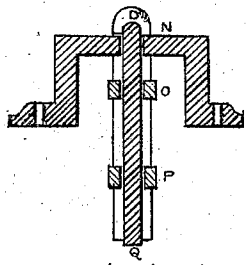

Fig. 4.

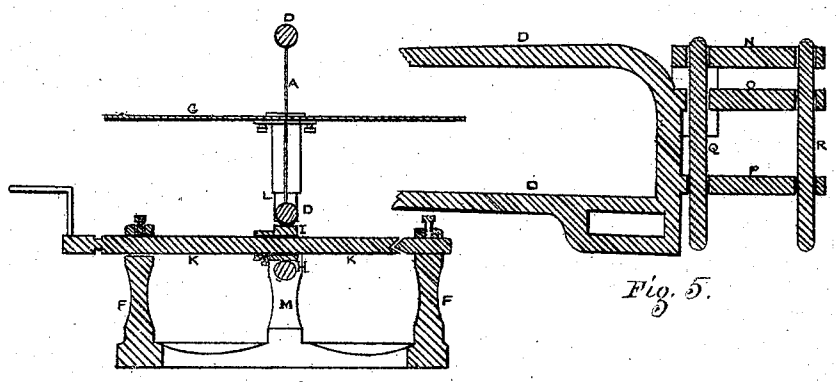

Fig. 2.

Fig. 5.

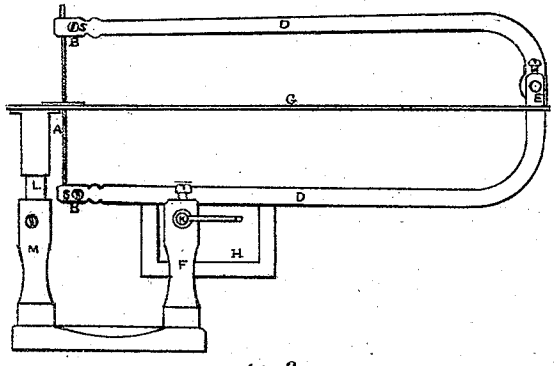

Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

BENJAMIN D. WALLACE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SCROLL-SAWS.

Specification forming part of Letters Patent No. 118,498, dated August 29, 1871.

To all whom it may concern:

Be it known that I, BENJAMIN D. WALLACE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Foot-Power Gig-Saws, of which the following is a specification:

Figure 1 is a longitudinal vertical section of my invention. Fig. 2 is a transverse vertical section on line *x y*. Fig. 3 is a front elevation. Figs. 4 and 5 are parts in detail of modifications, and Fig. 6 is a horizontal section of a part in detail.

The object of this invention is to produce a simple and efficient means of operating, by foot-power, a jig-saw for the purpose of sawing ornamental, fret, and other work usually performed by saws of like description. The present invention consists, mainly, of a bent spring, working on a shaft supported on standards attached to a platform, through which works a saw, attached by adjustable ends or fasts to the arms of said bent spring, which is operated by means of a cam working in a slot formed on the under side of the lower arm of the bent spring, and actuated by means of a driving-shaft of a lathe; or may be attached to any sewing or like machine actuated by foot-power. In combination with the bent spring above mentioned is a spindle or shaft, attached to the under side of the platform, and resting in a lathe-rest. It also consists of certain other details of construction, which, with the method of operation, will be more fully described hereinafter.

In the drawing, A represents a saw held in adjustable ends or fasts B B, which are made, as represented in Fig. 6, with a spring-slit, C, operated upon by a screw so as to hold or loosen the said saw A. The ends of the fasts B B are formed with a screw, which works in a screw-socket formed in the ends of the arms of a bent spring, D D, which works on a shaft, E, supported on standards or lathe-heads F attached to a platform, G. Attached to the under side of the lower arm of the bent spring D is a slot, H, in which operates a cam, I, attached to a driving-shaft, K. To the under side of the platform G is affixed a spindle, L, resting in the socket of the lathe-rest M. G also represents a sewing-machine-table, to which I apply my improved arm.

The invention being adjusted to the lathe, sewing, or other machine susceptible of foot-treadle operation, and power being applied to the driving-shaft K, the cam I is made to work in the slot H, thereby causing the bent spring D to operate on its shaft E in such a manner that the saw A is operated in a slightly-curved direction against any object brought in contact with it. To produce a perfectly vertical motion to the saw A the bent spring D is formed with standards N O P, and works vertically on the shafts Q R. By pressing the arms of the bent spring D together a stronger tension is had on the saw A, which is secured by means of the screws S operating on the slit-spring ends or fasts B B, thereby allowing the saw A to be adjusted at pleasure to the position desired. By means of the adjustable ends or fasts B B the arms of the bent springs D D may be lengthened or shortened, thus admitting the saw to be brought backward or forward to secure a down or up cut, as may be desired.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the arm D D with the adjustable ends B, as described.

2. The combination of the arm D D, platform G, spindle L, rest M, and lathe-heads F, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BENJAMIN D. WALLACE.

Witnesses:

CARROLL D. WRIGHT,

SAMUEL M. BARTON.